IN THE CLAIMS:

Please cancel claims 1-8 without prejudice or disclaimer.

Please add new claims 9-30 as follows:

--9. A system for storing data comprising:

a first storage system coupled to a processing unit, said first storage system including a plurality of first disk units and a first controller coupled to said plurality of first disk units; and

a second storage system coupled to said first storage system, said second storage system including a plurality of second disk units, a second controller coupled to said plurality of second disk units, and a second cache memory;

wherein said first controller

(a) receives plural pairs of write data and write time from said processing unit, and

(b) transmits said plural pairs of write data and write time and a reference time to said second controller,

and wherein said second controller

(c) stores write data received from said first controller in said second cache memory, and

(d) stores write data from said second cache memory to one of the plurality of second disk units if the write time corresponding to said write data is earlier than said reference time.--

--10. The system of claim 9,

wherein said reference time is determined based on a write time, and a write data corresponding to said write time is transmitted to said second controller.--

--11. The system of claim 9,

wherein said second controller further

(e) transmits a report to said first controller if a write data received from said first controller is stored into said second cache memory, and

wherein said first controller further

(f) determines said reference time based on a write time corresponding to a write data for which said first controller does not receive said report from said second controller.--

--12. The system of claim 11,

wherein said reference time is an earliest write time corresponding to a write data for which said first controller does not receive said report from said second controller.--

--13. The system of claim 12,

wherein said first storage system further includes a first cache memory, and said first controller further

(g) stores a write data received from said processing unit into said first cache memory,

(h) reports completion of a write request to said processing unit, and

(i) after reporting completion of the write request, stores said write data from said first cache memory to one of the plurality of first disk units.--

--14. A storage system coupled to another storage system comprising:

a controller coupled to said another storage system,

a disk unit coupled to said controller, and

a cache memory;

wherein said controller

(a) receives plural pairs of write data and write time from said another storage system, said pairs of write data and write time are transmitted from a processing unit coupled to said another storage system,

(b) stores a write data received from said another storage system to said cache memory,

(c) receives a reference time from said another storage system, and

(d) stores write data from said second cache memory to said disk unit, if the write time corresponding to said write data is earlier than said reference time.--

--15. The storage system of claim 14,

wherein said reference time is determined based on a write time, a write data corresponding to said write time is transmitted from said another storage system to said controller.--

--16. The storage system of claim 14,

wherein said controller further

(e) transmits a report to said another storage system if a write data received from said another storage system is stored into said cache memory, and

wherein said reference time is determined based on a write time corresponding to a write data for which said report is not transmitted from said controller to said another storage system.--

--17. The storage system of claim 16,

wherein said reference time is an earliest write time corresponding to a write data for which said report is not transmitted from said controller to said another storage system.--

--18. A system for storing data comprising:

a plurality of first storage systems each of which includes a first controller and a first disk unit,

a second storage system including a second cache memory, a second controller, and a second disk unit, and

a third controller coupled to said second storage system,

wherein each of said plurality of first storage systems receives a write data and a write time from a processing unit, and transmits received write data and write time to

said second storage system, and

wherein said second controller stores a plurality of write data received from said plurality of first storage systems to said second cache memory, receives a destageable time from said third controller, and stores a write data from said second cache memory to said second disk unit if a write time corresponding to said write data is earlier than said destageable time.--

--19. The system of claim 18,

wherein said third controller receives a plurality of first reference times from said plurality of first storage systems, and determines said destageable time based on said plurality of first reference times.--

--20. The system of claim 18, further comprising:

a plurality of second storage systems, and

wherein each of said plurality of second storage systems receives a plurality of first reference times from said plurality of first storage systems, determines a second reference time based on the received plurality of first reference times, and transmits said second reference time to said third controller, and

wherein said third controller determines said destageable time based on a plurality of second reference times received from said plurality of second storage systems.--

--21. The system of claim 20,

wherein said second reference time is an earliest time in said plurality of first reference times received from said plurality of first storage systems, and said destageable time is an earliest time in said plurality of second reference times received from said plurality of second storage systems.--

--22. A storage system coupled to a plurality of other storage systems comprising:

a disk controller coupled to said plurality of other storage systems;

a disk unit coupled to said disk controller; and

a cache memory:

wherein said disk controller receives plural pairs of write data and write time from said plurality of other storage systems, stores a write data to said cache memory, receives a destageable time from a controller coupled to said disk controller, and stores a write data from said cache memory to said disk unit if a write time corresponding to said write data is earlier than said destageable time.--

--23. The storage system of claim 22,

wherein said destageable time is determined by said controller based on a plurality of first reference times received from said plurality of other storage systems.--

--24. The storage system of claim 22 further comprising:

a plurality of disk controllers, and

wherein each of said plurality of disk controllers receives a plurality of first reference times from said plurality of other storage systems, determines a second reference time based on the received plurality of first reference times, and transmits said second reference time to said controller, and

wherein said destageable time is determined by said controller based on a plurality of second reference times received from said plurality of disk controllers.--

--25. The system of claim 24,

wherein said second reference time is an earliest time in said plurality of first reference times, and said destageable time is an earliest time in said plurality of second reference times.--

--26. The system for storing data comprising:

a plurality of first storage systems each of which includes a first controller and a first disk unit, and

a plurality of second storage systems each of which includes a second cache memory, a second controllers, and a second disk unit,

wherein each of said plurality of first storage systems receives a write data and a write time from a processing unit, and transmits received write data and write time to a second storage system, and

wherein each of plurality of second controller stores a plurality of write data received from a first storage system to a second cache memory, receives a destageable

time determined based on a write time of a write data to be transmitted to a second storage system, and stores a write data from said second cache memory to a second disk unit if a write time corresponding to said write data is earlier than said destageable time.--

--27. The system of claim 26,

wherein said destageable time is an earliest write time of write data to be transmitted to a second storage system.--

--28. The storage system coupled to a plurality of other storage systems comprising:

a disk controller coupled to said plurality of other storage systems;

a disk unit coupled to said disk controller; and

a cache memory;

wherein said disk controller receives plural pairs of write data and write time from said plurality of other storage systems, stores a write data to said cache memory, receives a destageable time, and stores a write data from said cache memory to said disk unit if a write time corresponding to said write data is earlier than said destageable time.--

--29. The storage system of claim 28,

wherein said destageable time is determined according to a write time of a write

data to be sent from one of said plurality of other storage systems.--

--30. The storage system of claim 29,

wherein said destageable time is an earliest write time of write data to be sent from one of said plurality of other storage systems.--